

Tree Shade for Energy Savings

Background with links

The [Chicago Urban Forest Climate Project](#) (US Forest Service 1994) concludes that a utility-sponsored shade tree program could be cost effective for both new and existing construction in the Chicago area. The [Midwest Community Tree Guide](#) (US Forest Service 2005) also recommends tree-planting as cost-effective energy conservation strategy. This concept has been demonstrated in Iowa, California and Arizona and perhaps in other areas.

In Iowa, Alliant Energy uses energy efficiency funds to plant trees and measures savings. Funds are passed through as grants to communities by a non-profit for planting in various locations. [Operation ReLeaf](#)

The Sacramento Municipal Utility District (SMUD) has a program to directly capture energy savings from tree planting. SMUD contracted with Lawrence Berkeley National Laboratory and the Center for Urban Forestry Research at the University of California to calculate expected savings. They report energy savings as part of their energy efficiency portfolio and has a system of verification. [Sacramento Shade](#)

Tucson has a tree planting for shade program sponsored by Trico Electric Cooperative. [Tucson Clean and Beautiful](#)

The City of Roseville, California integrated their shade tree program into the state's portfolio. The [EMV report](#) prepared by Navigant showed acceptable results. It concluded annual savings at tree maturity average 170 kWh/year and the overall program realization rate is 58%.

The [Columbia School of International and Public Affairs](#) prepare a report for the National Arbor Day Foundation on their [Energy-Saving Trees program](#). The report recommends strategies to incorporate tree-planting into energy efficiency portfolios.

Marketing Strategy

Municipalities have endured as many as 9 years of tree losses from emerald ash borer. Municipalities also identified the need to educate residents about energy efficiency in their sustainability plans in the Mayors Caucus regional sustainability plan study ([Greenest Region Compact 2, 2014.](#)) They will be collaborators in the program that will help restore community tree canopy. They can promote through municipal channels electronic and prints newsletters, community events, newspapers, and other municipal outlets.

Utilities can promote directly to candidate customers. Vegetation management programs for Com Ed and Ameren offer additional opportunities to communicate with candidate customers already engaged in tree-related concerns. Both Ameren and Com Ed already certify through Arbor Day Foundation's Tree Line USA program. Arbor Day Foundation also offers [Energy Saving Trees](#), a voluntary tree-planting program for utilities nationally. Non-profit tree advocacy and environmental groups could also provide effective outreach.

Collaboration

Com Ed is participating through the Arbor Day Foundation's [Energy Saving Trees](#) program. Small trees will be shipped at no cost to customers. On line benefit calculations are offered through the program's website. This new program will collaborate with this voluntary customer benefit program.